WATER-SKIING at 100,000 Pounds

By Lt. Drew Mitchell

Cockpit photo by Matthew J. Thomas
Photo-composite by Allan Amen

I was halfway through my two-and-a-half-year exchange tour with the Dutch Navy, flying P-3s. While their training is based directly on our NATOPS and training procedures, there are some differences. But I had gotten up to speed with the Dutch way of doing things in the aircraft, and life was good.

We were on our way to Curacao, in the Caribbean, from Holland, with an overnight stop in Lajes, Azores. Trading the European winter for New Year's in the Caribbean sounded great to me. The first leg would last about five hours. The weather brief mentioned the possibility of strong crosswinds at Lajes, but how bad could it be?

About two-thirds into the flight, I noticed the No. 4 engine was down to four gallons of oil. The flight engineer said that it had seven gallons at the beginning of the flight. There were no visible leaks and no history of No. 4 consuming oil. We discussed our options: continue to Lajes or turn back to Valkenburg (home plate). According to the weather briefs, Lajes had the better weather. With snow and high winds, Valkenburg had low visibility forecast all day, while Lajes had the possibility of strong crosswinds. At the current rate of oil loss, there would be two gallons of oil left on arrival at Lajes but none left if we turned back to Valkenburg, which would require a three-engine landing if we kept it running. This is something I wanted to avoid doing at night, in bad weather, if there was another option available. The temperature at altitude was well below freezing, so any prolonged shutdown with intent to restart was not a good idea. One of our propeller seals could freeze, causing leakage during a restart and causing more serious problems. We discussed the situation, and I decided to continue to Lajes.

On our initial descent into Lajes, winds at 2,000 feet were from 240 degrees, gusting 50-to 70-knots. At the approach end of the runway, winds were from 230 degrees at 18 knots, with a wet runway. With runway 15 in use, the crosswind was 80 degrees offset. The maximum-crosswind component for the P-3 is 35 knots, and with a wet runway, it goes down to 22.5, and with standing water, it is less than 20 knots. The winds at the middle of the field and departure end were not given. The forecast weather for our alternate, Montijo, Portugal, about two hours away, was gusty winds and thunderstorms for our arrival time. I really wanted to see what the actual conditions were before proceeding to our alternate. We briefed the approach and landing. We discussed crew responsibilities, windshear, crosswind limits, crosswind effect on the aircraft, and go-around options.

At 2,000 feet and 7 miles in light rain, we saw the runway just before intercepting the ILS glide slope. Except for the wind, the weather was better than I expected. We asked approach if there had been any landing traffic so we could get an actual weather report, but with no scheduled flights, the answer was no. There was, however, a civilian 737 taxiing for takeoff, which we took as a sign the wind was as reported on the runway. We continued on a long straight-in. At short final, roughly over the cliff that makes up the approach end of runway 15, we were at 100 feet and, as reported, the wind died down to a manageable crosswind. A five-to seven-degree right wing down and left-rudder input held us nicely on centerline for about four to five seconds. With approach speeds of 138, we were at 145 to 150 knots (extra airspeed for the gusty approach), stabilized at 100 feet (our pre-briefed visual-decision altitude). The moment of truth what should I do? Divert? Go around for a second pass? Land the airplane? I chose the latter option.

Several factors influenced this decision: an unfavorable weather forecast, high winds with rain and thunderstorms forecast at our alternate, and the probability of having to make a three-engine night landing at an unfamiliar and busy

terminal area. Also, my copilot had many flight hours in helicopters but only recently had qualified in the P-3 (the Dutch fly with only two pilots on all crew days less than 12 hours). Everything considered, divert was an unattractive option.

Out the corner of my eye, I could see the 737 was holding short to takeoff. If he thought it's good enough to take off, it's OK to land, right? Being stabilized above the runway at 100 feet and in position to land, the decision to land was easy to make.

I pulled power and entered the flair. We touched down with less than 7,000 feet of runway remaining. I felt relieved; for a few moments. I was pushing forward with right yoke and began to reverse the props, making sure I was below 135 knots to prevent inadvertent pitchlock while moving the power lever from the flight range to the ground range. I looked for four beta lights before using full reverse when, suddenly, a gust of wind hit us from the right. The nose of the plane skewed to the right, getting my full attention. I estimate the nosewheel had been on the ground for three seconds with the full aircraft weight on the wheels. Apparently there was standing water on this part of the runway, along with a lot more crosswind. I began water skiing, courtesy of dynamic hydroplaning, in a 100,000-pound aircraft at about 125 knots. The amount of turn caused by the gust of wind was 40 to 45 degrees: We were heading 190 to 195 degrees on runway 15.

I remember feeling my arm tense as the option to firewall it, get off the ground, and take my chances airborne went through my mind. But, almost as fast, I decided that getting airborne would be asking for even more trouble and opted to stay on the ground.

I said, "Down, right," on the ICS. My copilot, on the yoke, tried to push the nosewheel down to regain some control and to keep the upwind wing forced down. I moved No. 1 and No. 2 power levers to full reverse and No. 3 and No. 4 forward. With the power levers positioned, the four big windmills on the wings immediately took over. Constant-speed propellers were a great thing to have, straightening us out before we hit a dry spot.

Time compression (as well as seeing my life flash before my eyes) makes it hard to guess accurately, but I would say we hydroplaned for six to eight seconds, traveling the better part of 1,000 feet. You haven't lived until you look down the runway centerline out your port window in a 45-degree skid. I had visions of all the cartwheeling airplanes I had seen in movies, which was something I could soon experience.

We came to a stop with the left mainmount on centerline, a little over 1,000 feet of runway remaining and the rest of the flight station (especially me) not believing what had just happened. I set the parking brake on the runway to check for crew injuries or damage to the aircraft, and also to take a deep breath. We looked at each other in silence, which was broken by the control tower giving us permission to taxi and asking us for the braking action. Apparently they hadn't been paying attention to what we had just done. I replied, weakly, "Poor and roger." After a few more seconds, we slowly taxied to the line.

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Weather is never something to be taken for granted, especially in a place like Lajes that is known for high winds. Standing water and mid-to-end-runway, wind-condition reports were not given, but then again, I never asked for them. This led to a practical display of dynamic hydroplaning. Even when making the best decisions with the best information available, flight crews still can find themselves pushed into a box. Sometimes this box is not evident until after the fact, and I think that is what happened to me. I could have destroyed one of the Queen's aircraft, instead of having a good story and a couple of new gray hairs.

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